

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of Part 15 of the Commission's	)	ET Docket No. 98-153
Rules Regarding Ultra-Wideband	)	
Transmission Systems	)	

**REPLY COMMENTS OF THE VERIZON TELEPHONE COMPANIES<sup>1</sup>**

Verizon shares the concerns expressed by the U.S. GPS Industry Council that an increase in the noise level on Global Positioning Satellite (“GPS”) frequencies could interfere significantly with services that rely on GPS for timing because it could reduce the ability of radio receivers to acquire and maintain tracking of the GPS signal.<sup>2</sup> This, however, could be the effect of the Commission’s instant proposal to authorize unlicensed ultra-wideband services.

Verizon in a great many cases relies for network synchronization on a rubidium clock that is tied to the GPS system.<sup>3</sup> Such synchronization is necessary for network elements ranging from digital cross-connect systems to channel bank equipment to function properly. Timing is provided by allowing GPS reference signals to be received by an antenna located on a roof, in a window, or inside a building.

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<sup>1</sup> The Verizon telephone companies (“Verizon”) are the local exchange carriers affiliated with Verizon Communications Inc. listed in Attachment A.

<sup>2</sup> U.S. GPS Industry Council at 4.

<sup>3</sup> Network synchronization, which is essential for digital transmission and switching, is the means of keeping digital equipment in a network operating at the same rate.

In the event that ultra-wideband transmission systems cause interference with the GPS system, any service that relies on network elements for digital transmission or switching could undergo gradual service degradation by causing increased bit error rates and framing losses. This could result, for example, in distorted fax images and frozen videoconference screens. Continued loss of network synchronization may lead to a complete loss of service.

Accordingly, before authorizing ultra-wideband service to be placed on frequencies that could impact GPS operations, the Commission should await the results of ongoing testing and then seek further public comment on the potential for GPS interference based on those results.

Respectfully submitted,

/S/

Michael E. Glover  
Edward Shakin  
Of Counsel

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Lawrence W. Katz  
1320 North Court House Road  
Eighth Floor  
Arlington, Virginia 22201  
(703) 974-4862

Attorney for the Verizon  
telephone companies

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## THE VERIZON TELEPHONE COMPANIES

The Verizon telephone companies are the local exchange carriers affiliated with Verizon Communications Inc. These are:

Contel of Minnesota, Inc. d/b/a Verizon Minnesota  
Contel of the South, Inc. d/b/a Verizon Mid-States  
GTE Alaska Incorporated d/b/a Verizon Alaska  
GTE Arkansas Incorporated d/b/a Verizon Arkansas  
GTE Midwest Incorporated d/b/a Verizon Midwest  
GTE Southwest Incorporated d/b/a Verizon Southwest  
The Micronesian Telecommunications Corporation  
Verizon California Inc.  
Verizon Delaware Inc.  
Verizon Florida Inc.  
Verizon Hawaii Inc.  
Verizon Maryland Inc.  
Verizon New England Inc.  
Verizon New Jersey Inc.  
Verizon New York Inc.  
Verizon North Inc.  
Verizon Northwest Inc.  
Verizon Pennsylvania Inc.  
Verizon South Inc.  
Verizon Virginia Inc.  
Verizon Washington, DC Inc.  
Verizon West Coast Inc.  
Verizon West Virginia Inc.